

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-18. (canceled)

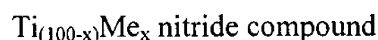
19. (currently amended): A sliding member consisting essentially of a substrate and a hard coating formed on said substrate, wherein said hard coating consists essentially of titanium nitride and Cr, has a face-centered cubic crystalline structure with a lattice constant ranging from 0.414 to 0.423 nm in a crystal of said nitride-based material and has a Vickers hardness of not less than 2500 Hv.

20. (currently amended): A sliding member consisting essentially of a substrate and a hard coating formed on said substrate, wherein said hard coating consisting essentially of titanium nitride and B, has a face-centered cubic crystalline structure comprising crystallites of an average size of not more than 9 nm and has a Vickers hardness of higher than 3000 Hv.

21. (currently amended): A sliding member consisting essentially of a substrate and a hard coating formed on said substrate, wherein said hard coating consisting essentially of titanium nitride and at least one element selected from the group consisting of Zr and Hf, has a face-centered

cubic crystalline structure with a lattice constant ranging from 0.414 to 0.423 nm in a crystal of said nitride-based material and has a Vickers hardness of not less than 2500 Hv.

22. (previously presented): A sliding member according to any of claims 19, 20 and 21, wherein said nitride-based material has a chemical composition defined in a formula, excepting inevitable impurities:



where Me represents one element selected from the group consisting of Cr, Zr, Hf and B, and x is in a range given by a relation:

$$2 \text{ atomic \%} \leq x \leq 30 \text{ atomic \%}.$$

23. (previously presented): A method for making a sliding member according to any of claims 19, 20 and 21, comprising the steps of: forming a hard coating on said substrate by simultaneously depositing in a vacuum Ti and at least one element selected from the group consisting of Cr, Zr, Hf and B on said substrate while irradiating said substrate with ion beams containing substantially nitrogen ions.

24. (previously presented): A sliding mechanism consisting essentially of a combination of a movable member and a static member, wherein either said movable member or said static member is made of a sliding member according to any of claims 19, 20 and 21, or made by a method comprising the steps of: forming a hard coating on said substrate by simultaneously depositing in a vacuum Ti and at least one element selected from the group consisting of Cr, Zr,

Hf and B on said substrate while irradiating said substrate with ion beams containing substantially nitrogen ions, and the remaining member is made of a material containing carbon.

25. (previously presented): A sliding mechanism according to claim 24, wherein said material containing carbon is a material containing substantially carbon, a material infiltrated with carbon or a thin film containing carbon.

26. (previously presented): A sliding member according to any of claims 19, 20 and 21, wherein said substrate is a metal material.

27. (previously presented): A method according to claim 23 wherein said substrate is a metal material.

28. (previously presented): A sliding mechanism according to claim 24, wherein said substrate is a metal material.

29. (previously presented): A sliding mechanism according to claim 25, wherein said substrate is a metal material.

30. (previously presented): A dressing tool consisting essentially of a sliding member according to any of claims 19, 20 and 21, or comprising a sliding member made by a method comprising the steps of: forming a hard coating on said substrate by simultaneously depositing in

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a vacuum Ti and at least one element selected from the group consisting of Cr, Zr, Hf and B on said substrate while irradiating said substrate with ion beams containing substantially nitrogen ions.

31. (canceled)